

STATE OF MAINE

DEPARTMENT OF MARINE RESOURCES

IN THE MATTER OF THE APPLICATION)
OF PIERCE ASSOCIATES, INC.)
FOR AN AQUACULTURE LEASE IN THE)
SHEEPSHOT RIVER, WISCASSET)
LINCOLN COUNTY, MAINE)

FINDINGS OF FACT,
CONCLUSIONS OF LAW
AND DECISION

On June 7, 1997, Pierce Associates, Inc. of West Buxton, Maine applied for an aquaculture lease totaling 3.24 acres of coastal waters of the State of Maine, off Birch Point adjacent to the facility known as the Mason Station power generating plant, in the Sheepscot River, Wiscasset, Lincoln County, Maine. The applicant requested the lease for a term of ten years for the purpose of cultivating rainbow trout and Arctic char.

Approval of aquaculture leases is governed by 12 M.R.S.A. §6072. This statute provides that a lease may be granted by the Commissioner of the Department of Marine Resources (DMR) if it is determined that the project will not unreasonably interfere with the ingress and egress of riparian owners, navigation, fishing or other uses of the area; the ability of the site and surrounding areas to support ecologically significant flora and fauna; the use or enjoyment within 1,000 feet of municipally, state, or federally owned beaches, parks, or docking facilities. The Commissioner must also determine that the applicant has demonstrated that there is an available source of organisms to be cultured for the lease site.

A public hearing on this application was held on April 29, 1998 at 7:00 p.m. in Wiscasset.

Evidence Introduced Concerning the Nature
and Impact of the Proposed Lease

Mr. Chris Heinig, president of the environmental consulting firm that assisted the applicant in the preparation of the lease application, the environmental baseline survey, and assessment of the proposed lease site, was the principal witness for the applicant. The consultant and the president of the company provided testimony on the application, baseline survey, and site assessment. (Exhibits 1A - 6)¹.

The consultant presented testimony on the geographic description of the proposed site location, a description of the proposed lease tracts, the development plan and schedule, the on-site evaluation and testing, and explained why the proposed lease and how the application satisfy the statutory criteria for granting an aquaculture lease. (Exhibit 6).

The consultant testified that the proposed lease site is located in a 3.24 acre area (approximately 285 feet x 495 feet) adjacent to the Central Maine Power Company's former Mason Power Generation Station's (Mason Station) dock on the western shore of the Sheepscot River off Birch Point, Wiscasset. The proposed lease encompasses a section of the Mason Station dock beginning at the north end of pier 4 and adjoining piers 5-7. The dimensions of the lease extend approximately 125 feet from the east and west sides of the dock and approximately 295 feet northerly from the end of the dock. (Exhibit 3).

The proposed lease would initially be operated with 3-4 sixteen meter (51 foot) diameter pens during the first 2-3 years. If the operation is feasible to raise fish, then the number of pens would be increased to a maximum of nine. The preferred pen arrangement would start with 3-4 pens on the shoreward or western side of the pier and, if successful, a pen would be added to the

¹ *The application and Department site review report were entered as Exhibit 1 in the hearing record. In this document, the application will be referred to as Exhibit 1A and the Department site review report as Exhibit 1B.*

end of the pier, and up to 4 more pens would be added on the eastern side of the pier. An alternative pen arrangement would place up to 5 of 9 pens from the north end of the pier towards the fixed piling structure (the "dolphin") located 295 feet from the north end of the pier. This would occur if the eastern side of the pier was inaccessible to the applicant under its lease agreement with the dock owners. The consultant testified that all equipment, moorings and other physical aspects of the project would be contained within the lease boundaries of the proposed site.

The pens would be installed with carrier, predator and bird nets with an 8-10 foot clearance off the bottom. The proposed project schedule would begin with 3-4 pens stocked with 10,000 to 15,000 fish to produce approximately 10-12 tons. Maximum production would be 24 tons per year.

Approximately 5,150 pounds per month of feed will be used during most of the year, except in the winter months when the amount would be cut back to approximately 2000 pounds per month for maintenance. The applicant intends to use standard industry acoustic devices to deter seals. The fish species to be raised include rainbow trout, Oncorhynchus mykiss, and Arctic char, Salvelinus alpinus. These species are available from commercial hatcheries in Maine and the applicant's hatchery facility, Shy Beaver Fish Hatchery, in West Buxton, Maine.

The consultant testified that the lease agreement for the use of the riparian's pier with Pierce Associates, Inc. has been renewed by the new owners of the Mason Station facility for a period of one year and that the applicant planned to renegotiate a longer term agreement. The new owner of the Mason Station is Florida Power and Light Company (FPL). The applicant's president testified that if no

long-term agreement can be reached, then the project would end and he would relinquish the proposed lease if granted.

The consultant stated that the proposed site is located outside any marked navigational channel and is approximately 1500 feet from the Wiscasset boat anchorage area. The consultant further testified, based on observations made April 22, 1996, and September 26, 1997, that there were several lobster buoys east of the dock. The list of lobster fishers contained in the application was based on observations by personnel working at the Mason Station. If granted the proposed lease, the consultant stated that the applicant would have no objection to the continuation of commercial (lobster) fishing within the open areas of the proposed lease, so long as they be contacted to have, if necessary, divers clear lobster gear tangles that might occur with the fish pens. He also stated that the project should not interfere with any recreational boating activity that may occur in the area.

The consultant testified that the on-site evaluation and testing for the required baseline field survey took place on April 22, 1996 and September 26, 1997. The proposed site has a depth at low water of approximately 37 to 41 feet from west to east from the east side of the dock and from 16-26 feet west to east on the west side of the dock or shore side. The temperature and dissolved oxygen measurements were consistent with values normally found in September. The bottom sediments were coarse or erosional type at the southern end and finer sediments of sand, silt and clay or depositional type sediments were found towards the north end of the site. The average current velocity at the surface was 9.4 cm per second on the flood tide and 6.6 cm per second on the ebb tide. The flow was predominantly to the south. During the 12 hour period of current measurements the flow was northerly during only 1 of the 12 hours sampled. (Exhibits 4 and 5).

The consultant described the resident flora and fauna observed during the dives. The benthic flora included limited amounts of drift rockweed and kelp. Resident fauna included lobster (observed 9-26-97 only), green crabs, mud shrimp, mysid shrimp, sea stars, sponges, anenomes and one sand dollar. The infauna or organisms found in the bottom sediments was dominated by various species of polychaete worms from the families Nephthyid and Paraonid.

The consultant addressed several questions. Regarding the use of a log boom, he explained that it would be used if the applicant found it necessary to divert debris from the pens and would be the same or similar log boom that has been previously used at the Mason Station facility.

He was asked what is the percentage of unused feed, its composition and whether growth hormones would be used. The president of the company answered that, based on his experience of feeding fish since 1986, 99 percent of the feed is consumed. The consultant added that, based on 11 years of monitoring experience at fish farms, the impact of any uneaten feed would be limited to the pen's shadow. The composition of the feed is mostly fish protein from herring and vitamins. No growth hormones would be used nor are any growth hormones for fish approved by the US Food and Drug Administration which regulates such use.

The consultant was asked if fish cause coliform bacteria and if uneaten feed would attract additional birds (seagulls) to the nearby clam flats. The consultant explained that fish do not produce coliform bacteria, it is caused by mammalian (warm blooded animals) and avian (bird) sources. He explained that the pens would be covered with nets designed to deter birds. He testified to his observations of the large amount of material (bird droppings) on the dock from the existing bird population. If there were any additional birds attracted to the pens their number would be insignificant

compared to the existing population. He explained that birds are attracted to open containers of feed which is controlled by husbandry or best management practices by any operator.

The president of the company was asked if he would be willing to waive the 300 foot restriction for dragging pursuant to 12 M.R.S.A. §6957. The applicant testified he would be willing to do this however the Assistant Attorney General present at the hearing explained that the law was enacted by the Legislature and cannot be waived by an applicant.

The president of the company stated that the operation would be very small to start and located on the western side of the pier. The site is the location of a previous operation that existed in the 1970's. It would take 2 - 3 years to test the site for feasibility. If the operation is successful, he would expand within the proposed lease site. If it is found to be feasible but he cannot expand as described, then the operation would not be profitable. He explained that Arctic char may not grow there, as it may be too warm, but he wishes to test the species. He stated that he has a lot of experience with rainbow trout and based on that experience, he explained that wild rainbow trout populations are difficult to establish. He has experience trying to establish wild rainbow trout populations in the Sheepscot and stated that it did not work because the habitat was not right. Based on his experience, he considered the concern about escapees competing with wild rainbow trout to be remote. He considers that the two species, rainbow trout and Arctic char, are ecologically safe for the Sheepscot River.

A marine biologist, employed by the DMR, testified about the statutorily required site review conducted on October 31, 1997. (Exhibit 1B) The Department report included the following criteria: a scuba diver survey of the local flora and fauna and bottom composition; vertical profiles of the water column which include temperature, salinity, dissolved oxygen and ph, and depths; collection of plankton; current measurements; proximity measurements of the proposed site to shore and to other leases; plus

observations and documentation of local fisheries. He testified that during the dive he observed that the substrate ranged from four to eight inches of soft mud and silt over sand and occasional shell hash. Water depths at mean low water ranged from 2.5 and 4.6 feet on the shore side corners to 32.2 - 48.3 feet at the eastern boundary corners and the center depth was about 31.5 feet. Current data taken at a three-meter depth averaged 7.8 cm/sec at approximately one hour past predicted high tide at Wiscasset. He observed blue mussels in abundance; green crabs, rock crabs, mud shrimp and sea scallops to be common; and lobsters, red shrimp, juvenile cod and the northern sea star as occasional. He observed approximately 200 lobster trap buoys to the north and east, but none within the proposed site boundaries. He testified that the distance from the northeast corner of the proposed site to the Wiscasset boat ramp is approximately 2,333 feet, Clough Point due east southeast to be approximately 2,370 feet, and the distance to Seal Rock located west of Clough Point is approximately 1,358 feet. He reported that he observed no moorings within the proposed lease boundaries, or in the near vicinity of the site.

He reported that the proposed lease site is not located within a buoyed navigational channel. The site is approximately 1,207 feet (due ESE) from the nearest US Coast Guard (USCG) channel marker, green can #27. The nearest existing aquaculture leases are located in the Damariscotta River. In addition he explained that the site is not located within any prohibited boundaries for essential habitat for endangered and threatened species according to the Department of Inland Fisheries and Wildlife (IF&W).

A representative for the Army Corps of Engineers (ACOE) testified regarding the ACOE permit process. He stated that his agency had received no concerns regarding this application either from the US Fish & Wildlife Service (USF&W) or the National Marine Fisheries Service (NMFS) in its

review process for this project. This statement was made pursuant to the federal Endangered Species Act regarding the pending listing of Atlantic salmon and subsequent Conservation Plan, and the short-nosed sturgeon, which is listed on the endangered species list.

The harbormaster for the Town of Wiscasset testified in opposition to the proposed lease. He stated that the mooring locations for the proposed fish pens were not clear in the application and that he believed the moorings would be outside the lease boundaries. He questioned if he would have to regulate the moorings as harbormaster, particularly those outside of the lease boundaries. He testified that the site poses more of an impediment to navigation than described by the applicant and the DMR's site evaluator. He stated that, in his opinion, the 30' depth contour near the Mason Station pier is needed by large vessels with drafts of 25-30 feet. The harbormaster read a letter from a co-property owner adjacent to and south of the Mason Station property. The concern was that deep water access to that property would be impacted by the proposed activities. The harbormaster described the property's potential development for use by large tankers or cruise ships. The harbormaster continued to testify that he has granted moorings from the Wiscasset boat launch to a point about 150 feet north of the proposed lease boundary or north of the dolphin. He stated that the USCG has promised to change green can C "27" to a red and green can which would allow passage on both sides of the can. He also requested that if the lease were granted, the applicant be required to notify the town of the location of each mooring inside the boundary.

Testifying as the Wiscasset Town Shellfish Committee chairman, the harbormaster explained that the town had shellfish enhancement programs in Cushman Cove and other nearby coves. He was concerned that the proposed activities would effect water quality (testing) that determines open and closed areas for shellfish harvesting. He asked that the Department water quality data for shellfish

sanitation be included as a baseline to monitor affects on shellfish sanitation by the proposed lease operations. He also inquired if the operation would effect the commercial marine worm harvest from the nearby mudflats.

Testifying on a personal basis, the harbormaster stated he was a scallop dragger and the proposed lease activities would interfere with his ability to drag for scallops in the surrounding scallop beds near the Mason Station. He testified that the proposed lease area east of the pier represents 40% of the productive scallop grounds in the Sheepscot River. He stated he fishes about 50% of the Sheepscot scallop population. The 300' dragger restriction law would be prohibitive to him as he uses the area adjacent to the pier in order to tow a drag to the waters south of the pier. He stated that he was the only scallop dragger in Wiscasset, although there are a few draggers from other towns.

The consultant responded to the issues raised by the harbormaster. He stated that the depths of the proposed lease area range from 33 - 37' and the difference is negligible inside the boundaries compared to the greater depths outside the boundaries. The harbormaster explained that the 30' contour drops down to 90' away from the site. He agreed that the site itself is not over the deepest water, but he requires the area to tow a drag to the areas that do have enough scallops to be dragged.

The consultant explained that the applicant intends to attach pens to the pier with cables on the pier. If lateral moorings are used they would be inside boundaries. The use of this type of mooring might be needed in an emergency therefor the applicant did not wish to be precluded from using this type of mooring. The consultant also explained that on both sampling dates at the site, he did not observe any marked boat moorings within 150 or 500 feet of the proposed lease boundaries.

Based on the consultant's 11 years of experience monitoring fish farms he explained that there have been no indications to date that there is any impact from fish farms on commercially harvested clam

or marine worm populations. He explained that the nutrient load from the nearby sewage treatment plant would be orders of magnitude higher than what the proposed fish farm would produce. He stated that if there has not been algal bloom problems due to high nutrients from the sewage treatment facility then it is highly unlikely the proposed fish farm would contribute any significant amount of nutrients compared to the existing conditions that would effect shellfish testing in particular.

The harbormaster was asked if a plan exists for his description of a development on the property south of the Mason Station for use by tankers, cruise ships or vessels larger than the converted incinerator ship Atlantic Star (369'). His answer was no.

The harbormaster was asked if in his position as harbormaster for the town he had any rights to control the use of privately owned docks and particularly as to what size vessels they chose to land at a dock, and he answered no.

Two lobster fishermen testified in opposition to the proposed lease. Each stated that the best lobster fishing in the area follows the 30 foot depth contour beside the Mason Station dock to the dolphin. One fishermen testified that there are 22 boats from Wiscasset, seven boats from Westport and five boats from Edgecomb that lobster fish in the area. He testified there are always traps there and there are 300 traps to as many as 8 traps per 10 foot area at the peak of the season on the proposed lease site on the eastern side of the pier to the boundary approximately 125 feet away (125 feet or the distance from the pier to the eastern boundary, by 495 feet or the length of the proposed lease, equals 1.42 acres of the 3.24 total acreage). He stated he fished 50 traps within the proposed lease boundary off the eastern side of the pier and that the season is June through November, with peaks in the summer and late fall. The second fisherman also testified that the site is fished year round and that there are 1000 lobster buoys within the proposed site area in the peak of the season. He stated that he believes uneaten

feed will interfere with lobsters entering lobster traps for the lobster bait, acoustic devices scare lobsters, and he did not believe the applicant will quickly respond to gear tangles as stated. He testified that he fishes 50 traps inside the boundaries and fishes there all year.

The first fisherman was asked why there were no traps inside the proposed lease boundaries during the Department site review October 31, 1997. He stated that there was not a fall shedder season in 1997.

A member of the Sheepscot River salmon club expressed concerns about fish diseases at the Pierce hatchery, escaped fish affecting the salmon restoration effort of the Maine Conservation Plan for Salmon Restoration as part of the non-listing of salmon as an endangered species and escaped fish competing with wild trout or salmon for breeding areas. The consultant responded that if Atlantic salmon were to be raised, it would only happen in cooperation with the Atlantic Salmon Authority and in accordance with the Salmon Conservation Plan.

A manager of the previous finfish aquaculture operation (Maine Salmon Farms) at this same location testified that he managed the original DMR finfish lease here from 1971-1976. The operation raised 400,000 - 600,000 fish per year. Only the western side of the pier was used as the east side was used by barges. They raised rainbow trout, coho, brook trout, and he said that the State attempted to raise Atlantic salmon. Regarding escaped fish, he stated that the fish stayed by the pens for feed. Escaped cohos were watched for five years but never established a run. He was a diver for four of the five years he worked at the site. He dove weekly, biweekly or never less than once per month in the river and stated that you could not tell from diving that the fish were ever there. There was not a lot of food on the bottom. He stated that he also harvested mussels from there to eat. In his opinion, most persons in Wiscasset did not know about the operation.

He was asked to describe the amount of lobsters and lobster fishing during the previous operation. He explained that there were very few or no traps in the river then. They had traps themselves at the tip of the pier as it fished well there, but it wasn't fished hard because of the barges using the pier.

At the end of the hearing the Town requested the right to be an intervenor so it could receive and comment on the proposed findings and decision when issued. The applicant did not object. The Town's request was granted.

Findings of Fact

The proposed 3.24 acre lease (approximately 285 feet x 495 feet) encompasses the north end of the Mason Station dock on the western shore of the Sheepscot River off Birch point, Wiscasset. The applicant has a lease agreement with the riparian owner, Florida Light and Power Company, for use of the dock facility. If the lease agreement with the riparian is terminated, the applicant stated a willingness to relinquish the lease voluntarily. Based on the information presented, I find that the proposed lease will not unreasonably interfere with the ingress and egress of the riparian owner.

The chart (Exhibit 2) and information presented as evidence and testimony by the applicants' consultant indicate that the site is located outside and west of the marked navigational channel for this area. According to the evidence and testimony, navigation within the boundaries from the shore to the pier, out to approximately 125 feet east of the pier and approximately 295 feet north from the end of the pier is lobster fishing vessels tending traps, recreational boaters or the riparian owner who has used the pier to land fuel barges in the past. While it was stated the 30 foot contour area adjacent to the pier was necessary for vessels of 25-30 foot drafts to navigate the area there was no evidence that vessels

drawing 25-30 foot drafts use that area. Whereas there is room and adequate water depths for vessels to navigate around the proposed site and based on the testimony and hearing record, I find that the proposed lease will not unreasonably interfere with navigation within the area.

According to testimony and evidence, lobster fishing and a limited amount of scallop dragging occurs in the vicinity and to a debatable extent on the proposed lease area. There was conflicting testimony and evidence in the record on the extent of the lobster fishery. Two local lobster fishermen testified that lobster fishing occurred within the site boundaries year round with 300 to 1000 to much larger numbers of traps placed within the boundaries. However, that testimony compared to Department testimony and the evidence of few to no trap buoys within the boundaries observed at random times during the year presents a considerable contradiction of the amount of lobster fishing within the proposed boundaries. Testimony indicated that the 30 foot depth contour near the dock is the best fishing ground in the river. This depth contour runs through the site adjacent to the pier, out the north end of the site and around the entire embayment. The applicant does not object to lobster fishing on the open areas of the site as long as fishermen contact him to remove any gear tangles that might occur with the fish pens equipment. Pursuant to 12 M.R.S.A. §6957 scallop dragging is prohibited within 300 feet of the surface structures of fish pens if that area is marked in accordance with that statute. Based on the most credible testimony and evidence in the record, including the testimony and report of the Department's marine biologist on the number of traps, the willingness of the applicant to allow lobster fishing in the open areas on the lease site, the availability of other areas for lobster fishing and scallop dragging and the absence of other aquaculture leases in the area, I find that the proposed lease will not unreasonably interfere with fishing in the area.

The consultant, who has extensive experience in environmental monitoring of finfish aquaculture activities, testified about the ability of the proposed site to accommodate the proposed lease activities, particularly regarding any impact on nearby shellfish and marine worm resources and on the local lobster population. The proposed site was shown to have adequate water depths and other characteristics to support the applicant's proposed activities. Therefore, I find that the proposed activities will not unreasonably interfere with the ability of the site and surrounding areas to support existing ecologically significant flora and fauna.

Testimony and evidence provided by the applicant indicate that the fish stocks will come from commercial hatcheries in Maine, or the applicant's hatchery facility. The applicant is required by statute and regulation to comply with all applicable fish health testing and environmental monitoring requirements. Given this information, I find that there is an available source of rainbow trout and arctic char stock to be cultured on the proposed lease site.

Based on the evidence, including maps, charts and testimony that the site is located adjacent to a privately owner pier and is over 2300 feet from the municipal boat ramp, I find that the proposed lease activities will not unreasonably interfere with public use or enjoyment and that the site is not located within 1,000 feet of any municipally, state or federally owned beaches, parks, or docking facilities.

Conclusions of Law

Based on the above findings, I conclude that:

1. The aquaculture activities proposed for this site will not unreasonably interfere with the ingress and egress of any riparian owner;

2. The aquaculture activities proposed for this site will not unreasonably interfere with navigation;
3. The aquaculture lease activities proposed for this site will not unreasonably interfere with fishing or other uses of the area, taking into consideration the number and density of aquaculture leases in the area;
4. The aquaculture lease activities proposed for this site will not unreasonably interfere with the ability of the lease site and surrounding areas to support existing ecologically significant flora and fauna;
5. The applicant has demonstrated that there is an available source of rainbow trout, Oncorhynchus mykiss, and Arctic char, Salvelinus alpinus to be cultured for the lease site; and
6. The aquaculture lease activities proposed for this site will not unreasonably interfere with public use or enjoyment within 1,000 feet of municipally, state or federally owned beaches or parks, or municipally, state or federally owned docking facilities.

The evidence in the record supports a finding that the proposed aquaculture activities meet the requirements for the granting of an aquaculture lease set forth in 12 M.R.S.A. §6072 (7-A).

Decision

Based on the foregoing, the Commissioner grants the requested lease to the applicant for a period of ten years from the date of this decision for the purposes of cultivating

rainbow trout and Arctic char using pen culture techniques as described in the application and the hearing record. The applicant shall pay the State of Maine rent in the amount of \$50.00 per acre per year. The applicant shall post a bond or establish an escrow account in the amount of \$5,000.00 conditioned upon its performance of the obligations contained in the aquaculture lease documents and all applicable statutes and regulations.

Conditions to be Imposed on Lease

The Commissioner may establish conditions that govern the use of the lease area and impose limitations on aquaculture activities. Conditions are designed to encourage the greatest multiple, compatible uses of the lease area, while preserving the exclusive rights of the lessee to the extent necessary to carry out the purposes of the aquaculture law.

The following conditions are placed on this lease: lobstering and fishing otherwise permitted by law is to be allowed in the open areas of the lease site. The lease area shall be marked in accordance with U.S. Coast Guard and Department of Marine Resources requirements. The applicant shall voluntarily relinquish the lease in writing to the Department, if the agreement to use the riparian's dock is terminated. The maximum number of pens is nine with the first four of these being situated on the shoreward or western side of the pier and the fifth one being on the northern end of the pier (or the fifth one being adjacent to the pen at the northwesterly corner of the pier in the event the alternative pen arrangement is used which continues from the north end of the pier towards the dolphin). This condition is added pursuant to Department regulations Chapter 2.37(1)(2)(C) and is designated to enhance the opportunities for traditional fishing.

The Commissioner may commence revocation procedures if he determines that

substantial aquaculture has not been conducted within the preceding year or that the lease activities are substantially injurious to marine organisms. If any of the conditions or requirements imposed in this decision, in the lease, or in the law are not being observed, the Commissioner may revoke the aquaculture lease.

DATED: _____

Lewis N. Flagg, Commissioner (Acting)
Department of Marine Resources